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1 ATRRYYLGAV ELSWDYMQSD LGELPVDARF PPRVPKSFPF NTSVVYKKTL
   51 FVEFTVHLFN IAKPRPPWMG LLGPTIQAEV YDTVVITLKN MASHPVSLHA
  101 VGVSYWKASE GAEYDDQTSQ REKEDDKVFP GGSHTYVWQV LKENGPMASD
  151 PLCLTYSYLS HVDLVKDLNS GLIGALLVCR EGSLAKEKTQ TLHKFILLFA
  201 VFDEGKSWHS ETKNSLMQDR DAASARAWPK MHTVNGYVNR SLPGLIGCHR
  251 KSVYWHVIGM GTTPEVHSIF LEGHTFLVRN HRQASLEISP ITFLTAQTLL
  301 MDLGQFLLFC HISSHQHDGM EAYVKVDSCP EEPQLRMKNN EEAEDYDDDL
  351 TDSEMDVVRF DDDNSPSFIQ IRSVAKKHPK TWVHYIAAEE EDWDYAPLVL
  401 APDDRSYKSQ YLNNGPQRIG RKYKKVRFMA YTDETFKTRE AIQHESGILG
  451 PLLYGEVGDT LLIIFKNQAS RPYNIYPHGI TDVRPLYSRR LPKGVKHLKD
  501 FPILPGEIFK YKWTVTVEDG PTKSDPRCLT RYYSSFVNME RDLASGLIGP
  551 LLICYKESVD QRGNQIMSDK RNVILFSVFD ENRSWYLTEN IQRFLPNPAG
  001 VQLEDPEFQA SNIMHSINGY VFDSLQLSVC LHEVAYWYIL SIGAQTDFLS
  651 VFFSGYTFKH KMVYEDTLTL FPFSGETVFM SMENPGLWIL GCHNSDFRNR
  701 GMTALLKVSS CDKNTGDYYE DSYEDISAYL LSKNNAIEPR SFSQNPPVLK
  751 RHQREITRTT LQSDQEEIDY DDTISVEMKK EDFDIYDEDE NQSPRSFOKK
 801 TRHYFIAAVE RLWDYGMSSS PHVLRNRAQS GSVPQFKKVV FQEFTDGSFT
 851 QPLYRGELNE HLGLLGPYIR AEVEDNIMVT FRNQASRPYS FYSSLISYEE
 901 DQRQGAEPRK NFVKPNETKT YFWKVQHHMA PTKDEFDCKA WAYFSDVDLE
 951 KDVHSGLIGP LLVCHTNTLN PAHGRQVTVQ EFALFFTIFD ETKSWYFTEN
1001 MERNCRAPCN IQMEDPTFKE NYRFHAINGY IMDTLPGLVM AQDQRIRWYL
1051 LSMGSNENIH SIHFSGHVFT VRKKEEYKMA LYNLYPGVFE TVEMLPSKAG
1101 IWRVECLIGE HLHAGMSTLF LVYSNKCQTP LGMASGHIRD FQITASGQYG
1151 QWAPKLARLH YSGSINAWST KEPFSWIKVD LLAPMIIHGI KTQGARQKFS
1201 SLYISQFIIM YSLDGKKWQT YRGNSTGTLM VFFGNVDSSG IKHNIFNPPI
1251 IARYIRLHPT HYSIRSTLRM ELMGCDLNSC SMPLGMESKA ISDAQITASS
1301 YFTNMFATWS PSKARLHLQG RSNAWRPQVN NPKEWLQVDF QKTMKVTGVT
1351 TQGVKSLLTS MYVKEFLISS SQDGHQWTLF FQNGKVKVFQ GNQDSFTPVV
1401 NSLDPPLLTR YLRIHPQSWV HQIALRMEVL GCEAQDLY
```

Fig. 1

GGCAATGGAG	CGTGAAGAAG	GGCCCCAGGG	CTGACCCCGG	CAAACGTGAC	(50)
CCGGGGCTCC	GGGGTGACCC	AGGCAAGCGT	GGCCAAGGGG	CCCGTGGGTG	(100)
ACACAGGCAA	CCCTGACAAA	GGCCCCCAG	GAAAGACCCC	CGGGGGGCAT	(150)
CGGGGGGGTG	TTGGCGGGTC	ATGGGGGGG	CGGGTCATGC	CGCGCATTCC	(200)
TGGAAAAAGT	GGAGGGGGCG	TGGCCTTCCC	CCCGCGGCCC	CCTAGCCCCC	(250)
CCGCAGAGAG	CGGCGCAACG	GCGGGCGAGC	GGCGGGGGT	CGGGGTCCGC	(300)
GGGCTCCGGG	GGCTGCGGGC	GGTGGATGGC	GGCTGGCGTT	CCGGGGATCG	(350)
GGGGGGGTC	GGGGGGCGCT	GCGCGGGCGC	AGCCATGCGT	GACCGTGATG	(400)
AG					(402)

Fig._2

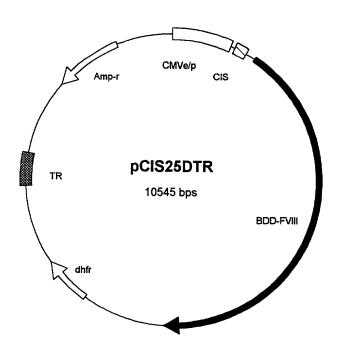
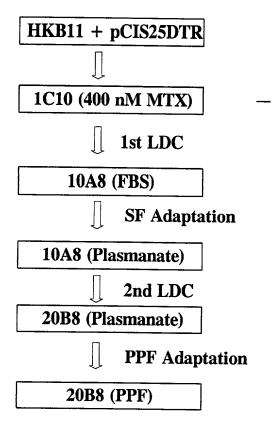
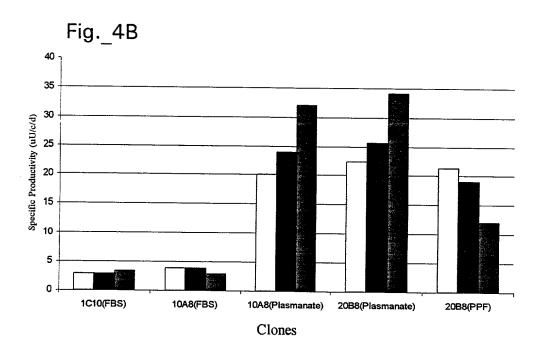


Fig._3

Fig._4A





Volumetric Productivity of HKB cells

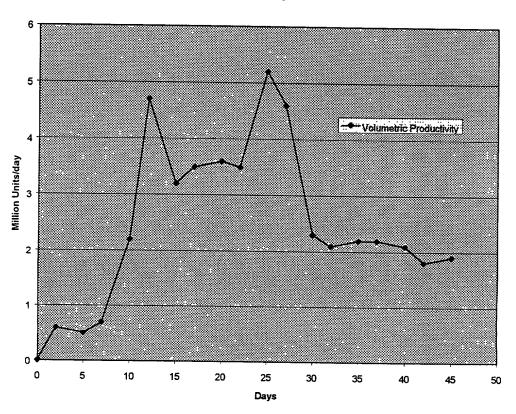


Fig._5